

STORMWATER ORDINANCE REVIEW WORKING GROUP

Summary notes from the meeting of January 13, 2010

The following is a summary of the notes submitted by working group members who participated at the meeting on January 13, 2010. For clarity and consistency, the notes have been edited.

Legal tools and drivers

- Review, revise and streamline the regulatory infrastructure
- Prepare inventory of all regulations. Policies, ordinances and include a copy of the *Erosion and Sediment Control Handbook*.
- Identify how these regulations intersect or conflict. Which ones supersede? Are there items in the policies that should be codified?
- Include copies of all materials related to this topic on the MPC web page.*

Identify regulatory barriers to developing land with less invasive design

- Examine sustainable design and conservation overlays.
- Determine the status of the sustainable design incentive working group and their efforts.
- Include a copy of *Better Site Design: A Handbook for Changing Development Rules in Your Community* on the website.

General comments

- What level of agricultural activity exists, what are the biggest problems and should we explore regulation of some agricultural activities in the future?
- Need to establish a review period for the Stormwater Ordinance.
- How will the regulations coming from EPA impact local regulations and resources?
- Re: Summary of Knox Co. Stormwater Management's Inspection Data (handout at the meeting), would like to see more detail about types of problems we are seeing and the trends we are seeing.
 - Is there a particular violation(s) that is dominant?
 - What are the issues regarding continued non-compliance?

- Can we look at these trends and identify ways to influence?
 - What support do we need to increase efficiency of inspections and support collections of penalties?
 - Where does penalty money go?
 - What tracking system are we using to trend data and how long has it been in use?
- Data trends that MPC has discussed might be of interest when we get to discussion on planning.

Suggested additional speakers

- Someone from Tennessee Clean Water Network. May be able to provide insight on intent/status of Clean Water Act. May have something to say about gaps in the current processes. May be willing to submit a written statement if there is not time for a presentation.
- Neil Denton. Could speak to the agricultural activity in the region. Need information on much and what type agricultural activity exists in the region and how it might be regulated in the future from a stormwater standpoint. His presentation might not take that long. If doing a second presentation would be too long, then a written statement might suffice.
- Fred Heitman. Has conducted stormwater inspectors' course. Might be useful as an overview. Content might help us visualize a legal framework.
- Humberto Gonzalez. Could provide an update of new EPA regs and post-construction issues and how it would impact local process.

Conduct process in the "real world"

- Must make an effort to suggest changes that can actually work and not be physically impossible on the site, without causing serious damage to expenses, aesthetics or the market.
- It has been mentioned that we may have 20 years before we run out of developable land in the Knoxville area. What we have---or will have---left over can be termed the "leftovers". All good land has been developed already. This needs to be kept in mind when we are trying to develop new regulations. Some of the stormwater procedures need to be re-worked, but we should be careful not to push too much on the already challenging parcels or get too far on the expense structure. Developing property per linear foot of road costs more today than it did 10 years ago.

Committee activities

- A tour of stormwater facilities, locations where they have chronic stormwater issues (volume and/or quality), success stories, etc., would be very beneficial. If someone like this exists, perhaps we could include a visit to a property with a developer who sees the potential for LID type practices who could talk about the constraints they face on-the-ground.
- Bonding - I do not know much about how bonds are used in the Knox County program. If all of the other participants have a good handle on this, then let's not take the time. But, it may be worth asking the Committee members.
- Permitting - an overview of the permitting path for developments in Knox County would be beneficial (timeline and process). This will help us understand where new requirements and incentives may fit in.
- Think about structuring our discussions around key concepts: 1) technical requirements for stormwater management; 2) integration of planning & stormwater from a policy perspective; 3) improvements in enforcement; 4) incentives/impediments to changing the way we do business; etc.
- How is Knox County defining "maximum extent practicable"?

Stormwater program implementation concepts to be considered

- Strengthen the links between planning and stormwater (ID impediments and design mechanisms to overcome these). In my mind this is the most important issue. Everything else falls from there.
- Adaptive management - can we link monitoring, demonstrated performance, and stormwater requirements into a more dynamic system? Perhaps not in its entirety, but an adaptive management program may be one way to structure incentives for LID.
- Prioritization has many possible benefits - 1) identifying high pollutant areas where chemical treatment such as alum is feasible; 2) prioritize facilities for proactive inspection; 3) prioritize BMPs based on watershed characteristics; 4) prioritize watersheds based on pollutant loads and development pressure (would play into future funding opportunities).

Stormwater management technical concepts to be considered

- Non-structural BMPs (e.g. street sweeping) - what's effective? County operations or require of landowners? Education?

- Permitting - what's the process now (including average timeline), opportunities to fast-track permitting for projects that implement LID practices (as opposed to LID developments requiring variances, which becomes an impediment)
- Performance certification for new technology
- Possibility of stormwater reuse?

Effectiveness of Low Impact Development (LID) practices*

- With EPA close to mandating LID practices, some feedback on LID practices might be helpful. Some environmental groups have concerns about LID practices because their effectiveness is very subjective as opposed to a facility that reduces a pollutant numerically (objectively). Additionally, many LID practices may lose their effectiveness over time. The science is still not there on life cycle effectiveness. Many scientists believe that the effectiveness is significantly reduced over time, even with good maintenance practices. However, that is just a guess because these devices have not been around long enough to test their effectiveness 25 years after installation. Furthermore, tight East Tennessee clays do not accommodate these practices well without soil amendments. Finally, although LID reduces the runoff from small storms, a flood system has to be built as well. This means that two stormwater systems have to be constructed: an LID system for small storms and a surface flow/culvert system for the floods.
- MPC will play a big roll in this. For years, MPC has been asked to re-write regulations in such a manner that LID practices, without variances, could be accommodated. Those that have been recommended and considered as “low hanging fruit” are items such as the removal of the requirement for "raised islands". Depressed islands are much better for water quality. The requirements for curbs and 26 feet wide roadways are other issues. Both of these items can often have an adverse impact on water quality. Without the curb requirement, we can allow surface flow into ditches, thereby improving water quality. More narrow roadways obviously require less impervious surface and better accommodate infiltration and surface filtration through vegetation.
- The changes that MPC needs to make may or may not improve water quality, but will at least eliminate a poor message to the development community. For example, right now, the roadway requirements in the MPC regulations are not the City's roadway requirements. Thus, the developer reads one thing in the subdivision regulations, yet City Engineering requires something totally different.

Meeting format

- When slides, or power point, are used, then we should use those more effectively for reference during periods of discussion.

- At some point during the process, we need to set goals for what the working group is doing.
- The group needs to look at the Swartz study on Beaver Creek regarding the negative effects of increased volume on flooding and water quality.
- The topic of “common water law” and relative Tennessee case law should be reviewed by the working group.
- The group needs to examine the use of discretion in the application of rules and regulations. What parameters should guide the use of discretion? Should the use of discretion be allowed?
- The group needs to address the issue of different standards between the City and the County. Determine where they are different and whether or not they need to be made the same, especially as they relate to the 2001 Urban Growth Agreement.

** An MPC website for the Stormwater Ordinance Review Working Group will be established.*

*** There appear to be several good websites describing Low Impact Development practices and principles. Just Google LID. We can list these websites on the MPC website for the working group.)*